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2019

Online at https://mpra.ub.uni-muenchen.de/103421/
MPRA Paper No. 103421, posted 23 Oct 2020 13:16 UTC

Economic activity, fiscal, and capital flow dynamics in Bulgaria 2007-2012: fiscal multiplier theory vs. "other things"

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Version 2016-03-25

Abstract:

When towards the end of 2008 the leading world economies found themselves in the grips of a severe global financial and economic crisis, their governments felt compelled to react. Most of them, especially in North America and Europe, did so by dramatic increases in government spending with two main goals: to bail our failing financial systems and to substitute dropping private demand with pumped-up public demand as a general support for the aggregate. At the same time central banks made large injections of liquidity to pump up the monetary base and thus counteract the severely contracting money multipliers – at the cost of putting on their balances assets of less than prime quality and thus in effect debasing the currencies of the respective economies.

Keywords: fiscal policy; multiplier effect; capital flows; small open economy

JEL: E12; E32; E62; F41.

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[2] This text benefits from a short Policy Brief, published in 2010 by CASE in Poland. While the main themes and thrust of the argument are similar, data have been extended and various insights added with the experience of more than two years since.

1. The logic of fiscal multipliers as a “general theory”

When towards the end of 2008 the leading world economies found themselves in the grips of a severe global financial and economic crisis, their governments felt compelled to react. Most of them, especially in North America and Europe, did so by dramatic increases in government spending with two main goals: to bail our failing financial systems and to substitute dropping private demand with pumped-up public demand as a general support for the aggregate. At the same time central banks made large injections of liquidity to pump up the monetary base and thus counteract the severely contracting money multipliers – at the cost of putting on their balances assets of less than prime quality and thus in effect debasing the currencies of the respective economies.

All of these steps constituted an almost point-by-point execution of the standard Keynesian policy proposal for times of slump: make money as easy as possible, and prop up government demand through deficit and accordingly debt-accumulating spending.

Many people, subscribing to the standard Keynesian logic of economic policy, would argue that it is precisely this swift action on the part of governments which is the sole reason why the world avoided slipping into a depression at least as deep and long as the Great one. Some prominent economists, including Nobel laureates Paul Krugman[3] and Joseph Stiglitz[4] continue to defend and promote the proposition that when the trough of the crisis seems to be behind most of the world, any attempts to cure budgets and consolidate public finances will inevitably cause a second dip into recession. Given the

[3] See his regular comments in his blog: http://krugman.blogs.nytimes.com/

[4] An explicit statement of his argument was made in front of Bloomberg: http://www.bloomberg.com/news/2010-08-24/stiglitz-says-government-cuts-set-to-push-europe-into-double-dip-recession.html

difficulties in the economic recovery, especially in Europe where a second dip of the recession is in fact occurring at the end of 2012 and the beginning of 2013, ultimately the IMF also reevaluated its position to claim that policies aiming at curing public budgets and debts while the economic crisis was still in the air have had a detrimental effect on the dynamics of economic activity.[5]

The main proposition made by all the above mentioned economists rests on two related, but not equivalent, claims. The first one is that fiscal stimuli help avoid depressions and shorten recessions. The second one is that fiscal consolidation causes recessions. In economic parlance, the claim is the following: the fiscal multiplier is large in both directions.

One can easily imagine the theory behind this claim, and it would include the standard argument that the fluctuations of overall economic activity are causally led by fluctuations in aggregate demand and the fiscal stance is an important determinant of aggregate demand. However, as is the fate of almost any other theory in the realm of social sciences, it can be realistic enough in specific contexts which are a strict subset of the overall set of specific contexts in the world and may lose a lot of its pertinence in other specific contexts. Thus, if a given country's government is to make a political decision on a course of policy action, the important question is the one about the theory's empirical validity not in general, but under the country's specific circumstances.

[5] See more specifically Blanchard, Olivier, and Daniel Leigh, "Growth forecast errors and fiscal multipliers", IMF Working Paper No. 13/1, January 2013.

2. A set of specific and unique circumstances

The case of Bulgaria over the last business cycle offers such a very peculiar set of circumstances, which can help throw light on the first part of the claims of the general theory that fiscal multipliers are large in both directions.

The set of Bulgarian circumstances in the first business cycle of the 21st century is indeed peculiar. This set includes, among others, five characteristics, which alone are enough to demonstrate the uniqueness of Bulgaria, but which also have – separately and combined – specific and significant economic meaning. This meaning is significant for the Bulgarian economic reality, but it is also significant for the theoretical and empirical question about the role of fiscal multipliers.

Bulgaria is a small, open, catching-up, member of the EU operating under a currency board arrangement.[6]

Small means that its size is negligible relative to world flows. Open means that it has active goods and services exchanges with the rest of the world. The combination of these first two characteristics means that the trade flows between Bulgaria and the rest of the world are large relative to its domestic size.

Catching-up means that its domestic rates of return are relatively high, so that in normal times it is highly attractive for capital, even though its smallness limits this attractiveness and prevents Bulgaria from having any significant role as a safe haven for capital during bad times, so it is to be expected that during a global or domestic downturn capital will tend to leave despite attractive rates of return. EU member means completely

[6] There is only one other country sharing these characteristics with Bulgaria, namely Lithuania. Of course, it is easy to show differences between the two in other important dimensions and thus that they are completely unique, but this is beside the main argument pursued here.

open current and, especially, financial accounts. Bulgaria is subject to free movement of factors of production. The combination of this second pair of characteristics means that not only trade, but capital flows between Bulgaria and the rest of the world are free and large relative to its size, and, which is probably even more important, only a small portion of those flows depends on domestic policies.

Bulgaria operates under a currency board regime, meaning that there is a highly institutionalized fixed exchange rate to the Euro and almost complete lack of autonomous domestic monetary policy – the central bank has no control over the monetary base and is not allowed to hold any form of Bulgarian debt, including government paper and loans to Bulgarian banks. For this reason the stability of the monetary regime requires fiscal prudence, and the country has actually recorded a decade of fiscal surpluses which have been piled up into the government's fiscal reserve.[7]

[7] The prudent fiscal policy in this period is a characteristic of Bulgaria, which is qualitatively different from the other five enumerated in this section. The difference is that the size and the position of a catching-up country are reflections of the natural, inherited state of affairs and cannot be changed at will. Openness, EU membership and the currency board are elements of the institutional setup of the country and can be changed, but such a change would involve all the intricacies of macroinstitutional change and have a very complex social dynamics. The budget balance, on the other hand, is a matter of current policymaking and is very much subject to the whims and preferences of the current government. The fact that four consecutive governments chose to, by and large, follow a prudent policy, is very interesting in itself, but is not part of the natural characteristics or the fundamental institutional setup of the country.

3. A test of the “general theory” in the specific circumstances

After a decade of fiscal prudence, when the global crisis knocked on Bulgaria’s door in late 2008, the country had ample reserves, as large as 20 % of annual GDP, stacked in a highly liquid form, ready for spending. It is important to note that to start spending Bulgaria did not need issuing new debt and raising all kinds of problems with the private sector feelings and expectations about the future servicing of this debt, which plague many countries in the world. Bulgaria had ample fiscal reserve, cold cash stashed abroad, ready to be spent without crowding out anybody’s access to credit or desire to spend.

And Bulgaria did spend it. At the end of the first quarter of 2013 the size of the fiscal reserve, measured as a percent of GDP for the last 4 quarters, is less than a third of its size in September 2008. Measured through the change in the government net debt position, in order to clear away effects of changes in government debt, the Bulgarian government has stimulated the economy in each of the 17 quarters starting with the first of 2009,[8] in some cases by as much as 4 to 6 % of current GDP. One would imagine that, given such support, the Bulgarian economy should have avoided a recession altogether, or at least seen a very mild one. The facts, as illustrated in Figure 1, however, are a bit different.

[8] As of the moment of writing this streak continues.

Figure 1. Fiscal stimulus (measured as change in consolidated state budget on cash basis as % of GDP) and economic growth in Bulgaria 2007-2012.

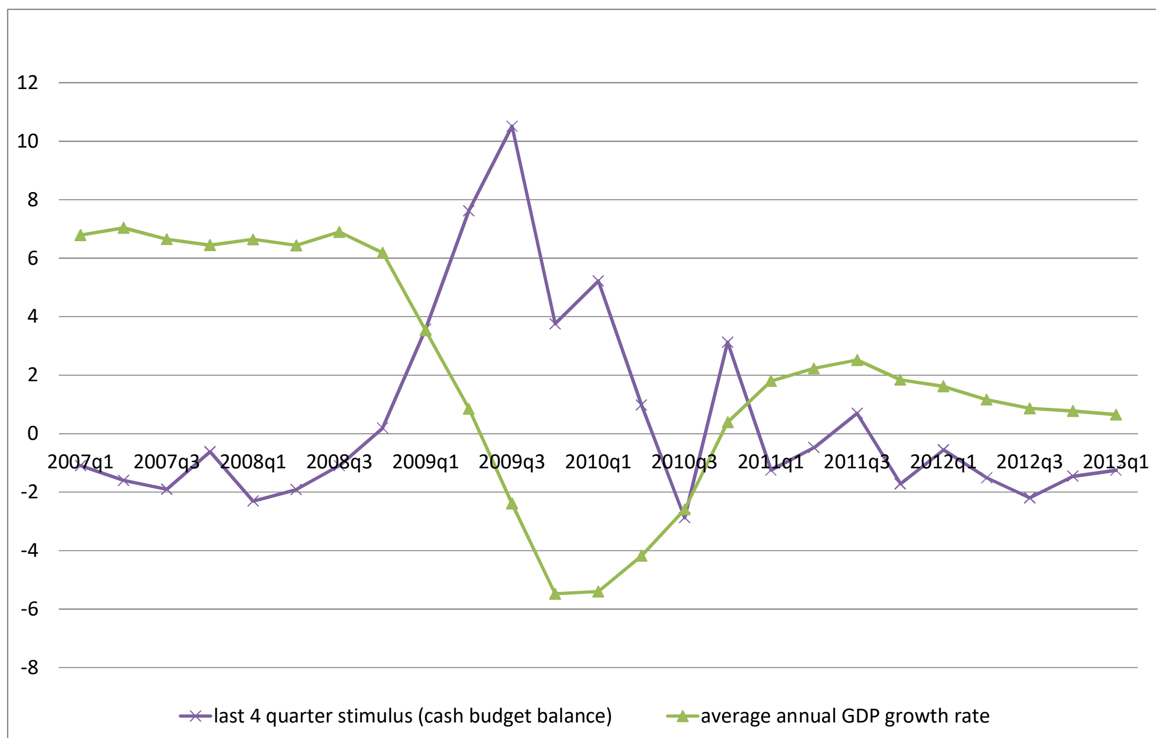

Figure 1 shows that in each of the first seven fiscally stimulated quarters the dynamic Bulgarian economic activity worsened – either slowed down or contracted, in some cases between 5 and 6 % annually. To put things in comparative perspective, the 2009 Bulgarian recession was a bit deeper than the overall EU-27 recession, while the economy was stimulated by about 4 % of GDP. From another perspective, over the period from late 2008 to mid-2010 Bulgaria saw half of its huge fiscal reserve gone with nothing to show for it. No multiplier effect seems to be visible here.

On the contrary, if we look at the simultaneous dynamics of the fiscal stance and the overall economic activity, it is very easy to see that in the case of Bulgaria while fiscal consolidation was happening (2007-2008, and 2011-2012) the economy was

growing, and while a very large fiscal stimulus was applied, the economy contracted and continued to stay depressed for several quarters in 2009 and 2010. The Bulgarian data and experience for 2009-2010 put a serious empirical obstacle to the claim that fiscal stimuli soften recessions. The Bulgarian data and experience for 2011-2012 put a serious empirical obstacle to the claim that fiscal consolidation necessarily leads to recession.

4. Can the fiscal multiplier general theory survive the Bulgarian facts?

A natural counter-argument from the point of defense of the fiscal multipliers theory would be that fiscal stimuli work with a time lag, so that the improvements in economic activity dynamics in Bulgaria after mid-2010 are a response to the stimuli of early 2009, implying a one to one-and-a-half year response time. This is a valid hypothesis. But there are some serious empirical arguments against it, and also there are other valid hypotheses explaining the same growth dynamic without fiscal multipliers and without necessity to rely on assumptions about long lags. One empirical argument against it is that Bulgaria, being small, should not exhibit long lags. Another is that the improvement of the overall economic dynamic came primarily from a very fast increase in exports, reflecting a rise in final demand not so much in Bulgaria, but abroad – and there is no way the Bulgaria fiscal stimulus can affect demand abroad.

Of course, this development has another ready theoretical explanation in the specific features of the Bulgarian economy mentioned above – it is small, open, catching-up in a huge market of freely moving capital. And this explanation is centered on the fact that under these circumstances the capital flows into the country in globally good times

and out of the country in globally bad times are dwarfing the otherwise large changes in the fiscal position. To illustrate this, Figure 2 shows very similar data as the one used to illustrate the fiscal stimulus, only now it shows the change in government net debt position in comparison with the changes in net capital flows to and from the country. The Figure uses absolute values, so that the comparison is only in size.

Figure 2. Fiscal stimulus (measured as change in net government debt position) and capital flows in Bulgaria, both as % of GDP, 2007-2012.

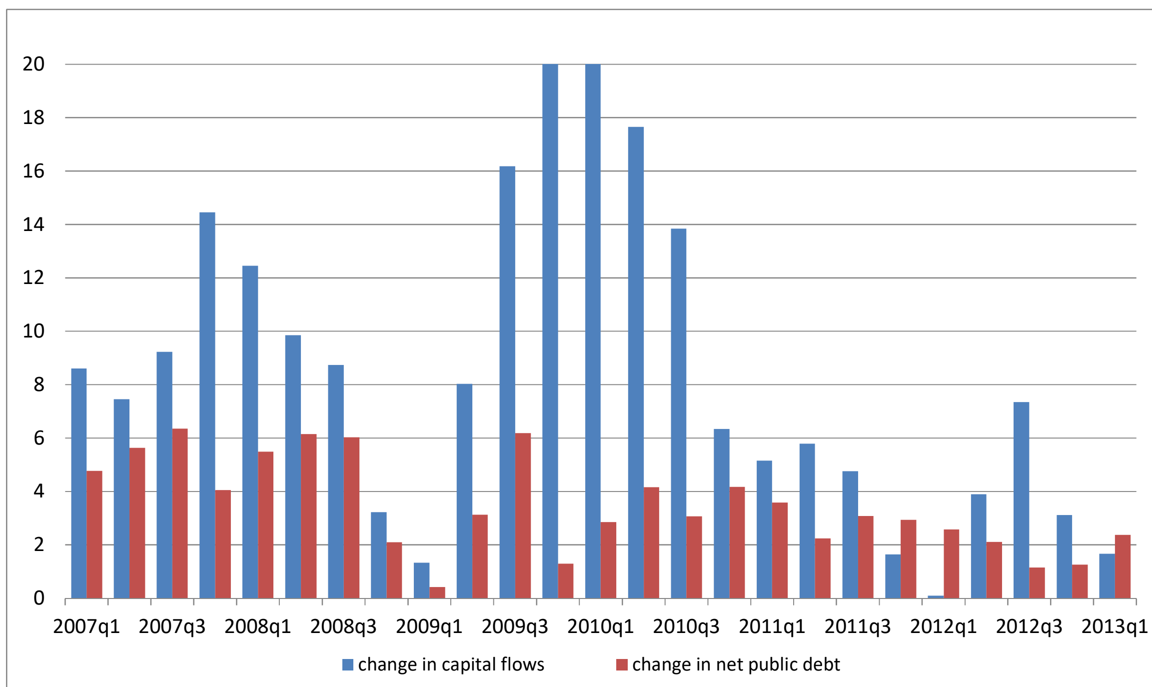

Figure 2 starkly demonstrates the fate of a small, open, catching-up EU economy. The fiscal movements of its government, and they were large indeed by any measure, were almost always several times, in some cases orders of magnitude, smaller than the relevant capital flows. For only three of the 25 observations in Figure 2 the change in the fiscal position was larger than the change in the capital flow. During the good times of

the business cycle these flows create domestic demand. During the bad times they depress domestic demand. There is nothing, beyond a trifle, that the government of this small economy can do to substitute for these flows in the bad times, and under the EU it is legally forbidden to block their entry during the good times. Paul Seabright's[9] metaphor is spot on in this case:

"Politicians are in charge of the modern economy in much the same way as a sailor is in charge of a small boat in a storm… [T]heir influence over the course of events is tiny in comparison with that of the storm around them"

Of course, it has to be recognized immediately here that all these are not formal econometric tests of the validity of the fiscal multiplier versus the other potential theories explaining the Bulgarian facts. It may very well be that such a test will prove that a fiscal multiplier does in fact exist, in the "statistical significance" sense of the word, in Bulgaria. It may also prove that this multiplier is not only statistically significant, but even large in international comparison. None of the abovementioned facts and alternative hypothetical explanations refutes the fiscal multiplier general theory conclusively. Other thing equal, as is the tradition of stating theories in economics, the fiscal multiplier in Bulgaria may exist and may indeed be relatively large, we do not know.

[9] From "Company of Strangers", p. 25, quoted by Greg Mankiw: http://gregmankiw.blogspot.com/2010/08/wise-passage.html

5. Some important qualifying considerations

The whole problem with the fiscal multiplier general theory in the case of Bulgaria, however, is to be found in this traditional qualification, which we economists seem to have developed a habit of not noticing any more: “other things equal”. In fact, we do know other things are never equal. In the case of small open economies they are simultaneously both never equal and always important.

From the point of view of pure economic theory, it might be extremely important whether there is a fiscal multiplier and whether it is large. From the point of view of actual, real-life policy-making this is not the relevant final question, but just a preliminary one. If it is recognized that policy-makers face, as every other economic agent, the reality of scarcity and the necessity to chose between alternative uses of the scarce fiscal resources, then the only policy relevant question is not whether the fiscal multiplier is large, but whether it is larger than “other things” in the respective specific and unique country context.

In a sense this consideration follows the logic of Ziliak and McCloskey (2008)[10] in claiming that for real-life policy-making statistical significance is essentially useless and the only thing that matters is economic and social significance.

In the case of Bulgaria, even if there is a fiscal multiplier and even if it is large, there are also “other things” which not only do change, but have two other important characteristics. First, they very probably depend, even if in a roundabout and indirect

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[10] Ziliak, Stephen T., and Deirdre N. McCloskey, *“The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice and Lives.”* Ann Arbor: University of Michigan Press, 2008. See also the especially enlightening exchange between Thomas Mayer and Ziliak and McCloskey on the pages of the September 2012 and January 2013 issue of the online journal Econ Journal Watch: http://econjwatch.org/articles/ .

manner, on the fiscal stance of the government. Second, they are large relatively to the fiscal multiplier effect.

The most important such “other thing” is the international capital flows to and from Bulgaria. As suggested by Figure 2 most of the time these flows have an effect on aggregate domestic demand in Bulgaria which is several times to an order of magnitude larger than any change in the fiscal position. If the fiscal policy of the government has an influence on these flows, and if this influence requires fiscal policy measures which are different from the measures implied by the logic of the fiscal multiplier theory, then the government faces a genuine policy choice which cannot be resolved on the basis of the simple claim that fiscal multipliers exist in theory and may be of specific size in reality. The government has to constantly ask itself which – the fiscal multiplier effect or the “other things” – will be larger.

6. Summary and a policy suggestion

As many other countries, Bulgaria met its recession of 2009 with a very substantial fiscal stimulus in an attempt to substitute depressed private demand. Unlike most other countries, Bulgaria had used the good times before the recession to behave in a fiscally responsible manner and had piled a large fiscal reserve in highly liquid, ready to spend assets so that government spending could immediately be expanded without simultaneously causing the usual complementary problems of crowding out and aggravating expectations.

The fiscal stimulus in Bulgaria did not prevent recession, even if it might be argued that it may have softened it a bit. Later, when the fiscal reserves were depleted and the government began a process of fiscal consolidation, this did not cause a second dip of the recession. It seems that the effectiveness of fiscal policy and thus the economic significance of the fiscal multiplier both in the direction of stimulus and in the direction of consolidation have been weak over this particular episode.

This is possible under two scenarios only, First, the fiscal multiplier does not exist or is very small in Bulgaria. This first scenario seems unlikely and it is not the contention of this study to claim any such finding.

Second, and much more policy-relevant, the fiscal multiplier exists and is relatively large, but other things are more economically and socially significant and trump its effect. The most important candidate for a member of set of these important "other things" is international capital flows. This is especially true given the five fundamental characteristics of the Bulgarian economy: small, open, catching-up, member of the EU, under a currency board.

Thus international capital flows trumping the fiscal multiplier seems exactly the experience of Bulgaria in the period 2007-2012. And, if we extend Seabright's metaphor, the best strategy to navigate a small boat in a big storm is to pay attention to the storm and its flows. In the case of Bulgaria this would mean to actively manage not domestic demand, by trying to substitute government spending for it, but to actively manage the way in which the huge international capital flows treat your particular country. Under such a strategy the fiscal reserve, this fruit of reasonable fiscal austerity during the good times, still has a crucial role to play, but in a possibly dramatically different way. Rather

than being spent in order to substitute the un-substitutable, it may serve as a lever to make the international capital a bit more willing to enter and a bit less quick to exit. This strategy can hardly ever be much more than a hope, but what else is there for a small bark in the storm?